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Conference Abstract

A GBIF-hosted portal for Germany: Der Lebendige Atlas der Natur Deutschlands (LAND)

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Abstract

Biodiversity data can be messy, scattered, and hard to obtain (Engel et al. 2023). National biodiversity data infrastructures fulfill essential functions for science, policy, and practice by structuring national data landscapes and bridging connections between local and global initiatives and infrastructures (Güntsch et al. 2024). As the German national research data infrastructure for biodiversity (NFDI4Biodiversity), we set out to make German biodiversity data FAIR (findable, accessible, interoperable, re-usable) and open (Luther et al. 2022). One of our products is the Lebendiger Atlas der Natur Deutschlands (LAND),*[1] a national biodiversity portal that provides species occurrence data in Germany to researchers, conservation authorities, and the general public. We joined forces with the Global Biodiversity Information Facility (GBIF) as well as the national node GBIF Germany and created LAND using the GBIF-hosted portal service (Fig. 1).

LAND integrates species occurrence data from different sources, including monitoring initiatives, citizen science, natural history societies, museums, and universities. Initially, the portal was mainly populated with datasets already available through GBIF. Now, our focus has shifted to mobilizing and publishing new datasets from the NFDI4Biodiveristy

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consortium and other national partners (e.g., Engel et al. 2025, Rehbein et al. 2025). To further enhance the service and increase the mobilization of new datasets to GBIF and LAND, we organize annual community workshops with 50–80 stakeholders from various institutions. These events are designed to strengthen capacity, foster networking, and support the development of new strategic collaborations with local and interdisciplinary partners.

In this contribution, we present the current state of the portal and its key functionalities, and highlight opportunities for data holders and researchers to become involved. Furthermore, we are eager to engage with similar initiatives in other countries.

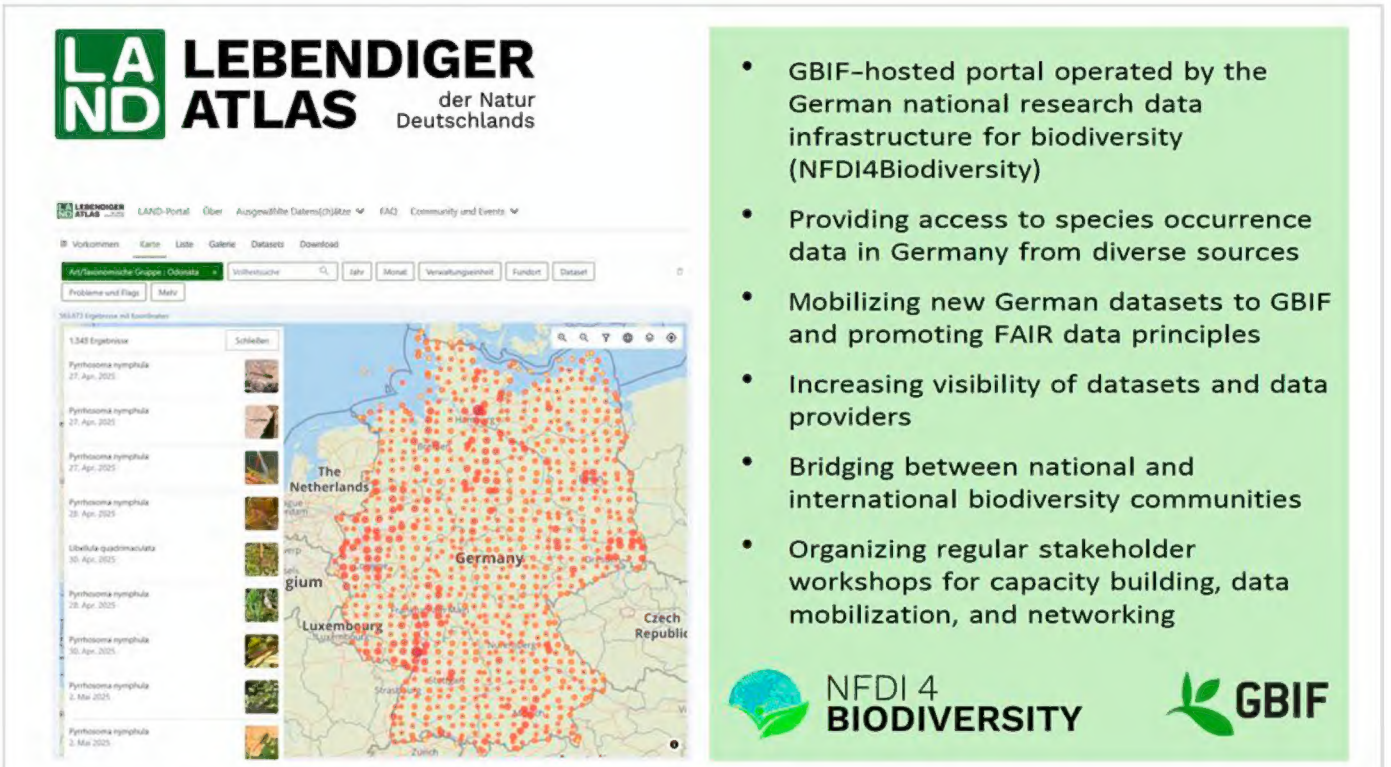
LAND
LEBENDIGER ATLAS
der Natur Deutschlands
The Netherlands
Germany
Luxembourg
Czech Republic
GBIF-hosted portal operated by the German national research data infrastructure for biodiversity (NFDI4Biodiversity)
Providing access to species occurrence data in Germany from diverse sources
Mobilizing new German datasets to GBIF and promoting FAIR data principles
Increasing visibility of datasets and data providers
Bridging between national and international biodiversity communities
Organizing regular stakeholder workshops for capacity building, data mobilization, and networking
NFDI 4 BIODIVERSITY
GBIF

Figure 1.

Graphical abstract showing the LAND portal interface (left) and key summary points (right). The GBIF map is based on openstreetmap, licensed under ODbL. Figure licence: CC-BY-SA

Keywords

LAND Portal, Living Atlas of Nature Germany, biodiversity portal, NFDI4Biodiversity, citizen science, species occurrence data, NFDI, research data infrastructure, open biodiversity data

Presenting author

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Conflicts of interest

The authors have declared that no competing interests exist.

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Endnotes

*1 https://land.gbif.de/